92
138
LIBRARY
FISH & WILDLIFE SERVICE
PACIFIC OCEANIC FISHERY
INVESTIGATIONS
QH1.U55

PROCEEDINGS OF THE UNITED STATES NATIONAL MUSEUM

issued *by the*

SMITHSONIAN INSTITUTION
U. S. NATIONAL MUSEUM

Vol. 92 Washington: 1942 No. 3138

A NEW STOMATOPOD CRUSTACEAN FROM THE WEST COAST OF MEXICO

By STEVE A. GLASSELL

THROUGH the kindness of Capt. Fred E. Lewis, of Balboa, Calif., I received an interesting stomatopod that he collected on a recent expedition to the west coast of Mexico in his yacht, the M. S. *Stranger*. This crustacean proved to be a new and unusual member of the genus *Squilla*. In order to call attention to the peculiar eyes of this new species, I have named it *Squilla oculinova:*

Order STOMATOPODA: Family SQUILLIDAE

Genus SQUILLA Fabricius, 1787

SQUILLA OCULINOVA, new species

FIGURE 7

Holotype.—Female, U. S. N. M. No. 79380, from Santiago Bay, near the port of Manzanillo, state of Colima, Mexico, 10–13 fathoms; March 24, 1939; collected by Capt. Fred E. Lewis.

Diagnosis.—No median carina on carapace or rostrum. Raptorial dactylus with four teeth, including the terminal one. No mandibular palp. Epipodites on first three thoracic limbs only, accessory branches of last three pairs of thoracic legs 1-jointed. On the abdominal segments intermediate, lateral, and marginal carinae are discernible; on fifth and sixth the intermediates are more plainly marked than on proximal somites; the sixth somite is the only one with submedian carinae. Cornea emarginate, with a scalloped an-

433739—42

terior border. Antennules and antennae bearing rami and geniculate spines. Antennal acicle cordate, nearly twice as long as wide. Telson with median and submedian carinae only.

Description.—Anterior width of carapace slightly more than half the length, exclusive of rostrum. Anterolateral angles not spined. Rostrum wider than high, without carina. Carapace smooth and shining, with only a suggestion of a median carina. The cervical groove does not cross the median area, although it does interrupt the gastric groove.

The cornea are subtransversely placed on their stalks; the inner margin of the stalk is shorter than the outer; on the median line the stalks and cornea are equal in length to the width of the rostrum, as is also that portion of the stalk proximal to the cornea. The distal margin of cornea is emarginate, with a median U-shaped groove, from which on either side it rises to a rounded crest, thence into a saddle or depression, and finally to a blunt rounded peak. The effect on looking at this scalloped edge from above is that the margin is beaded, owing to the protruding facets of the cornea; it does not form a distinct line when viewed from the front.

The antennules are armed with geniculate spines and rami. The antennae possess rami at their distal ends. The antennal acicle is cordate, with a heavy median longitudinal vein; in the proximal half it is wider than half its length.

There is no mandibular palp.

The outer inferior angle of the merus of the raptorial leg is rounded; the carpus has a groove and keel above, the latter entire and terminating distally in a rounded-off right angle; the propodus is armed with the usual three spines and series of pectinations; the dactylus is armed with four teeth including the terminal one; the outer margin of the dactylus is angled posteriorly and notched just before the angulation. In all respects the raptorial leg is subsimilar to that of *S. swetti* Schmitt.[1]

The free thoracic somites are smooth and have carinae on the last three somites in line with the intermediates of the abdomen other than the marginals; the fifth somite has a pair of curved carinae, one on its proximal, the other on its distal anterolateral margins, almost meeting on the median line, that of the distal margin terminating in a forward-pointing spine, that of the proximal ending in a small ventral spine beneath the other; lateral margins of the sixth and seventh somites rather truncate, with rounded angles. Epipodites on the first three thoracic limbs only, accessory branches of the last three pairs of legs 1-jointed.

[1] Allan Hancock Pacific Expeds., vol. 5, No. 4, p. 146, fig. 3, 1940.

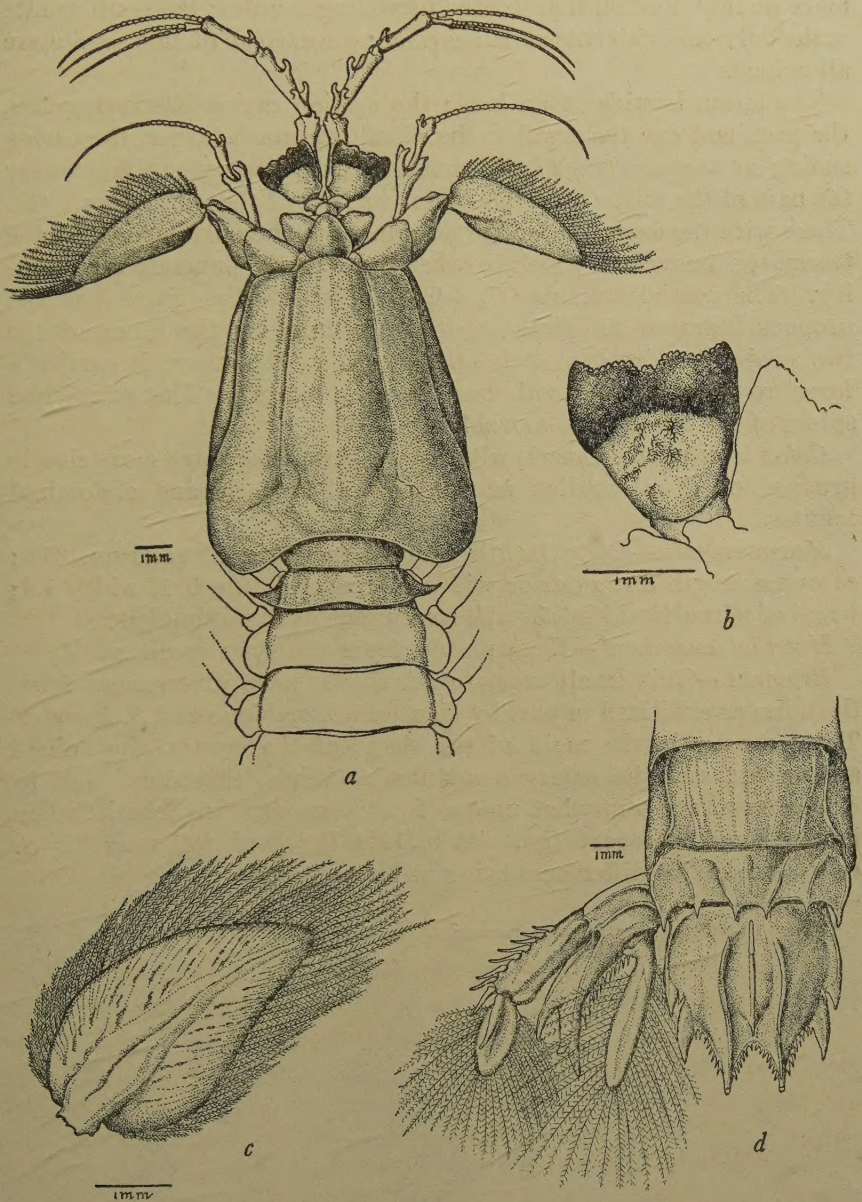

FIGURE 7.—*Squilla oculinova*, new species; female holotype: *a*, Anterior portion of animal; *b*, eye; *c*, antennal acicle; *d*, telson and left uropod.

On the abdominal somites intermediate, lateral, and marginal carinae are discernible; on the fifth and sixth the intermediates are more plainly marked than on the preceding somites; the sixth somite is the only one with submedian carinae; the carinae of this somite are all spined.

The telson is wider than long; the median carina has two spines, the proximal one the smaller, the distal one much larger, the carina ending at the median V; the submedian carinae extend from near the base of the telson onto the dorsal surface of the submedian teeth. These with the exception of the marginal are the only carinae on the telson, the surface of which is otherwise slightly punctate and shining. The denticles number 7, 8–9, 1. The bifurcate process of the uropods bears 10–12 spines on its inner margin; the inner of the two projections is about twice the length of the outer; it carries a large rounded-tipped tooth on its outer margin. The submedian spines of the telson have movable tips.

Color in alcohol.—Cream, with brown chromatophores more closely grouped on distal median margins of all thoracic and abdominal somites.

Measurements.—Body length overall, exclusive of rostrum, 35.6; carapace length 8.1, anterior width 4.5; rostral length 1, width 1.5; lengh of telson 4, width 5.5. All measurements in millimeters.

Material examined.—Known only from the type specimen.

Remarks.—This small stomatopod shows some divergences from the norm as exhibited in part by Hansen's *S. ambigua* and *S. incerta.*[2] These consist in the main of the shape of the cornea, the spined antennules, and the enlarged antennular acicle, characters that in *S. oculinova* are somewhat unique for the genus. In Schmitt's key in the Hancock report (*op. cit.*, p. 140) it would fall near his *S. swetti*, the major differences being as above stated.

[2] *Siboga* Expedition, Stomatopoda, monogr. 35, pp. 6, 8, 1926.

U. S. GOVERNMENT PRINTING OFFICE: 1942